

[Name of Document] What Is Claimed Is

[Claim 1] A method of controlling a substrate processing apparatus that comprises: a loading/unloading section loading/unloading a substrate; a processing section processing the substrate; and an inspection section
5 inspecting the substrate, the substrate transferable between the sections,

wherein a substrate processing flow and a substrate inspection flow are independently executed, the substrate processing flow being a flow in which the substrate loaded into the loading/unloading section is carried to the processing section to be processed, and the substrate inspection flow being a
10 flow in which the substrate loaded into the loading/unloading section is carried to the inspection section to be inspected.

[Claim 2] The method of controlling the substrate processing apparatus according to claim 1,

wherein the substrate having undergone the substrate processing flow
15 is returned to the loading/unloading section, and the substrate inspection flow for the substrate in the loading/unloading section is executed when the inspection section is not engaged in the inspection of another substrate.

[Claim 3] The method of controlling the substrate processing apparatus according to claim 1,

20 wherein the substrate inspection flow is executed for an external substrate that is loaded into the loading/unloading section from an external part of the substrate processing apparatus, when the inspection section is not engaged in the inspection of the substrate having undergone the substrate processing flow.

25 [Claim 4] The method of controlling the substrate processing apparatus according to claim 1,

wherein the substrate processing flow and the substrate inspection flow are executed in a unit of a lot of the substrates, the substrate inspection flow is executed for a lot having undergone the substrate processing flow, and the substrate inspection flow is executed for an external lot loaded into the loading/unloading section from an external part of the substrate processing apparatus in a manner that an execution period of the substrate inspection flow for the external lot does not overlap with an execution period of the substrate inspection flow for the lot having undergone the substrate processing flow.

10 [Claim 5] The method of controlling the substrate processing apparatus according to claim 4,

wherein the substrate inspection flow for the lot having undergone the substrate processing flow is given a priority over the substrate inspection flow for the external lot.

15 [Claim 6] The method of controlling the substrate processing apparatus according to claim 4,

wherein the substrate inspection flow for the external lot is given a priority over the substrate inspection flow for the lot having undergone the substrate processing flow.

20 [Claim 7] The method of controlling the substrate processing apparatus according to claim 1,

wherein a predetermined inspection unit is selected from a plurality of inspection units provided in the inspection section and the substrate inspection flow in the selected inspection unit is executed for the substrate.

25 [Claim 8] A substrate processing apparatus comprising: a loading/unloading section loading/unloading a substrate; a processing section

processing the substrate; and an inspection section inspecting the substrate, the substrate being transferable between said sections, and the substrate processing apparatus further comprising

a control section executing a substrate processing flow and a substrate inspection flow independently from each other in the substrate processing apparatus, the substrate processing flow being a flow in which the substrate loaded into said loading/unloading section is carried to said processing section to be processed, and the substrate inspection flow being a flow in which the substrate loaded into said loading/unloading section is carried to said inspection section to be inspected.

[Claim 9] The substrate processing apparatus according to claim 8, wherein said control section returns the substrate having undergone the substrate processing flow to said loading/unloading section, and executes the substrate inspection flow for the substrate in said loading/unloading section when said inspection section is not engaged in the inspection of another substrate.

[Claim 10] The substrate processing apparatus according to claim 8, wherein said control section executes the substrate inspection flow for an external substrate loaded into said loading/unloading section from an external part of the substrate processing apparatus, when said inspection section is not engaged in the inspection of the substrate having undergone the substrate processing flow.

[Claim 11] The substrate processing apparatus according to claim 8, wherein said control section executes the substrate processing flow and the substrate inspection flow in a unit of a lot of the substrates, executes the substrate inspection flow for a lot having undergone the substrate

processing flow, and executes the substrate inspection flow for an external lot loaded into said loading/unloading section from an external part of the substrate processing apparatus in a manner that an execution period of the substrate inspection flow for the external lot does not overlap with an
5 execution period of the substrate inspection flow for the lot having undergone the substrate processing flow.

[Claim 12] The substrate processing apparatus according to claim 11,
wherein said control section gives a priority to the substrate inspection flow for the lot having undergone the substrate processing flow over the
10 substrate inspection flow for the external lot.

[Claim 13] The substrate processing apparatus according to claim 11,
wherein said control section gives a priority to the substrate inspection flow for the external lot over the substrate inspection flow for the lot having undergone the substrate processing flow.

15 [Claim 14] The substrate processing apparatus according to claim 11,
wherein said control section gives a priority, in a switchable manner, either to the substrate inspection flow for the lot having undergone the substrate processing flow or to the substrate inspection flow for the external lot.

20 [Claim 15] The substrate processing apparatus according to claim 8,
wherein said inspection section includes a plurality of inspection units,
and

wherein said control section selects a predetermined inspection unit from the plural inspection units to execute the substrate inspection flow in the
25 selected inspection unit for the substrate.

[Claim 16] The substrate processing apparatus according to claim 8,

wherein said control section controls said loading/unloading section, said processing section, and said inspection section.